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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,362	11/27/2001	Shlomo Novotny	2442/120	9021
45774	7590	09/21/2005	EXAMINER	
KUDIRKA & JOBSE, LLP ONE STATE STREET, SUITE 800 BOSTON, MA 02109			CIRIC, LJILJANA V	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,362

Applicant(s)

NOVOTNY ET AL.

Examiner

Ljiljana (Lil) V. Ciric

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004 and 28 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) 14,15,25,26,36-41 and 45-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13,16-24,27-35 and 42-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 05092005.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Office action is in response to the replies filed on February 17, 2004 and on April 28, 2004, as well as to the status inquiry received on February 3, 2005.
2. Claims 1 through 54 remain in the application. Of these, claims 14, 15, 25, 26, 36 through 41, and 45 through 54 remain withdrawn from consideration, whereas claims 1 through 13, 16 through 24, 27 through 35, and 42 through 44 have all been amended, either directly or indirectly.

Response to Arguments

3. Applicant's arguments filed on February 17, 2004 have been fully considered but they are not persuasive.

As a preface to the examiner's traversal of applicant's arguments relating to the applicability of the Nakamura reference, applicant is first of all respectfully reminded that claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974). The broadest reasonable interpretation of the claims of the instant invention requires, for example, that any air flow passageway allowing air flow parallel to the surface be readable on the "air path parallel to the surface" as recited in the claims of the instant invention.

Thus, in response to applicant's argument that the Konstad et al. reference neither discloses, suggests, nor teaches having a blower oriented such that a port of the blower opens into an air path parallel to the surface or motherboard, the examiner hereby notes that Konstad et al. most definitely does disclose fan or blower 303 oriented such that a port of the fan or blower 303 opens into an air path parallel to the surface or motherboard 300, the air path parallel to the surface or motherboard 300 being formed by adjacent memory cards 301, for example.

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Applicant's arguments thus fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicant's arguments thus also do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

Election/Restrictions

4. Claims 14, 15, 25, 26, 36 through 41, and 45 through 54 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to non-elected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on July 31, 2003.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1 through 13, 16 through 24, 27 through 35, and 42 through 44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is no proper antecedent basis in the claims for "an air path" as recited in the limitation "such that the second port opens into an air path parallel to the surface" [claim 1, lines 8-9; claim 6, lines 8-9; claim 16, lines 8-9; claim 27, lines 8-9; claim 42, lines 6-7]. Also, it is not clear whether any structure is associated with the air path as recited in the claims (i.e., does this term merely refer to an air stream or more specifically to a duct structure through which air flows), nor is it clear whether the air path

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itself is being positively recited as part of the claims or not, thus rendering indefinite the intended scope of protection sought by the claims.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. As best can be understood in view of the indefiniteness of the claims, claims 1 through 4, 6 through 12, 16 through 23, 27 through 34, and 42 through 44 are rejected under 35 U.S.C. 102(e) as being anticipated by Konstad et al. (previously of record).

Konstad et al. discloses a system and corresponding method for cooling electronic components essentially as claimed, including, for example: a surface or circuit board or motherboard 300 to which one or more electronic components or memory cards 301 (see Figure 4) are coupled, where the memory cards may include a heat sink (see column 4, lines 23-28); and, a blower 303 directly mounted (using supporting members 309 of the blower assembly) to the surface or motherboard 300, with the blower 303

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having two ports. The frame-type top portion of bracket 304 surrounding fan or blower 303 (see Figure 4, for example) is broadly readable as required on the shroud as recited in claim 34 of the instant application. The embodiment of Figures 3 and 4 discloses the impeller of the fan or blower 303 as having an axis which is perpendicular to the surface or circuit board or motherboard 300 and non-intersection (i.e., parallel) with the plane of the memory cards 301 and any heat sinks included thereon (see column 4, lines 23-28) as recited in each of base claims 27 and 42 of the instant application. Each of the ports of the blower 303 also opens into an air path formed by memory cards 301 which is parallel to the surface or motherboard 300.

The reference thus reads on the claims.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. As best can be understood in view of the indefiniteness of the claims, claims 5, 13, 24, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konstad et al. (previously of record).

As described in greater detail above, Konstad et al. discloses a system for cooling electronic components essentially as claimed, including various miniaturized elements of the system having dimensions which have an order of magnitude of under an inch (see column 3, lines 55-64).

While Konstad et al. does not explicitly disclose the height of the system as being under 1.75" as recited in claims 5, 13, 24, and 35 of the instant application, it is conceivable that a system comprising only a few elements, wherein the elements are sized 0.2 inches and 0.6 inches as disclosed by Konstad et al. will likely have a cumulative height of under 1.75" or not much over this value. Furthermore, changes

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in size, absent unexpected results associated therewith, are generally not sufficient to establish patentability. See *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955).

Thus it would have been obvious to one skilled in the art at the time of invention to modify the system of Konstad et al. by keeping the height of the system under 1.75" in order to minimize the size of the whole electronic system within which the cooling system is installed.

Terminal Disclaimer

11. The terminal disclaimer filed on February 17, 2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of prior Patent No. 6,438,984 B1 has been reviewed and is accepted. The terminal disclaimer has been recorded.

12. The terminal disclaimer filed on April 28, 2004 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of prior Patent No. 6,587,343 B2 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Ciric whose telephone number is 571-272-4909. The examiner can normally be reached on Mondays through Fridays from 10:00 a.m. to 6:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene, can be reached at 571-272-4930.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ljiljana (Lil) V. Ciric
Primary Examiner
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